Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

"RECONSTRUCTION IN PHILOSOPHY."

This book contains a series of lectures delivered by Prof. John Dewey in the Imperial University of Japan.

As the title indicates, the aim of the lectures is to reconstruct philosophy. The development of philosophy, according to Professor Dewey, has not proceeded along correct lines. There has been bad aim and waste in effort.

The point of view from which philosophy is to be reconstructed is that of pragmatism. That is, the development of knowledge is to proceed along the lines of willing rather than of knowing. Being interested in logic, I wish to examine Professor Dewey's doctrine of logic. This is contained in Chapter VI of the book and is termed, "The Significance of Logical Reconstruction."

The teaching of the chapter is based upon the view of knowledge given in Chapter IV, "Changed Conceptions of Experience and Reason." Hence we begin with this chapter.

In this chapter Professor Dewey works out to the conclusion, "Thinking is the way in which deliberate reorganization of experience is secured." The teaching of John Locke is not correct. Knowledge does not begin in sensation. "The senses lose their place as the gateways of knowledge to take their rightful place as stimuli to action." A sensation is "urgent not cognitive in quality." "Knowledge is relegated to a derived position, secondary in origin." Prof. Dewey attributes this change of view to biology. "The effect of the development of biology has been to reverse the picture. Wherever there is life, there is behavior, activity. In order that life may persist, this activity has to be both continuous and adapted to the environment." "Wherever there is life, there is behavior, activity." That is, the ultimate is life, and life is active. "Even a clam acts upon the environment and modifies it to some extent. It does something to the environment as well as has something done to itself." I do not know what value the reader will attach to the contradiction in Professor Dewey's statement. The ultimate is life and life is activity. Yet this activity must be continuous. Not only is a must associated with this ultimate, but this must requires continuity. Continuity is not change; it is not action. It is the opposite of action. Continuity is identity that persists in and through change. Not only must there be continuity but the activity must be "adapted to the environment." Whatever "adapted may mean, it surely cannot mean change. It is therefore interesting that Professor Dewey contradicts his doctrine in stating it. That is, Professor Dewey's explanation fails to consider the full content. The ultimate is action, yet in this ultimate action there is present that which does not act, in fact resisting all action. If the statement, "A sensation is urgent not cognitive in quality," is examined, it seems impossible to follow Professor Dewey.

Look at the figure 4, you get a clear, definite, complete percept. Examine this state of consciousness as you will, you do not detect any pull or push. The four has no connections. It is a concept in the sphere of quantity and is ultimate. It is pure. That is, it gives no evidence of dependence upon something different; nor does it produce any other. To me it is utterly without any "urge." A student once said that the four was made of apples. Two apples and two more apples would make four. The teacher accepted the challenge and ordered a barrel of apples. The task was to get a four. The class became industrious and excited. One man secured apple sauce; another got cider; another secured float. The failure to secure a four was complete.

There are sensations that excite emotions that lead to action; but many do not. An engine standing upon a beautiful road-bed with shining steel rails does not have the impulse to move. The impulse to move has its source in the boiler, not in the head-light. If we take a case of knowledge upon a higher level, say a bit of analysis by a scientist, we are unable to see the urgency. A chemist has a specimen of water. He wishes to know its structure and makes an analysis. Here is an emotion, a desire for knowledge, then the action of the analysis, then the knowledge. The action is well done, the knowledge is correct. This knowledge, water is H20, does not have the quality of urgency, but rather the opposite. It is a state of satisfaction, an end of action, a state of peace and rest.

Pragmatism is able to give an account of action on the level of quantity; but it fails in questions of quality. Take the case of wheat. We plant a grain and get a harvest of twenty grains. Here is a gain of nineteen grains. Pragmatism appears to offer the best explanation of these nineteen grains. There has been no change in quality. In each of the twenty grains is the identical quality. In fact if any change appears in any one of the grains, then some thing other than the action of the original grain is brought in as explanation. "Accidental variation" or some other meaningless phrase is invoked. The fact is, pragmatism fails at this point. The absence of change in quality is as important to pragmatism as the presence of change of quantity.

Pragmatism fails utterly on the level of finished and complete knowledge. I suppose it will be admitted that the multiplication table offers a piece of finished and perfect knowledge. We can know its life for at least three thousand years. During this period there has not been the slightest suggestion of any change of any kind. It is literally the same yesterday, to-day and forever. My mind refuses to entertain any possible change in this table. This characteristic of the table is not a peculiarity of the table. It is seen in the table because the table is an example of finished truth. Any body of knowledge has illustration of this mark of truth. In fact I do not see how it would be possible to develop a body of knowledge, if there were no fixed and dependable parts. Activity seems to belong to the unfinished, the incomplete, the young. When the truth is seen, what else is there? When a problem is solved, or a difficulty mastered, it seems impossible to act further. Change would appear in the effort to get the truth. The errors made in this effort are no part of the truth. The effort and the error cease with the knowledge. This brief sketch will show that we are unable to follow Professor Dewey in his doctrine of the place and function of knowledge. The statement is not adequate.

We now proceed to consider the doctrine in the chapter. "The Significance of Logical Reconstruction."

Professor Dewey begins his statement with a complaint as to the sad condition of logical theory. There is no agreement as to the aim, the method or the content of logic. "Logical theory presents a scene of chaos." "These contrarieties are so numerous, so extensive, and so irreconcilable that they are ludicrous." This scandalous condition is to be removed in the reconstruction submitted by Pragmatism.

It is admitted that logical theory does not present uniformity in method nor identity of content. Absolute uniformity is found in two spheres. One is the cemetery; the other is in fashion. If one wishes to establish citizenship in a cemetery, there is one thing to do. But if one wishes to be a rose, he has a choice. If one wishes to be a fish, his option ranges from a sucker to a whale. If he wishes to be a logician, the range is still wider. Form is uniform; life is not. The richer the life, the wider the variety. Hence if logic is to deal with form, with the dead, we may expect uniformity. If it is to deal with life, we may expect exciting forms of variety. Professor Dewey says the variety amounts to chaos. I do not believe in chaos anywhere and so I take Professor Dewey as authority for abundant variety in the sphere of logical theory. This should indicate that logic, whatever it may be, is a living thing.

This brings us to the question, what is logic?

Professor Dewey says, "If thought or intelligence is the means of intentional reconstruction of experience, then logic, as an account of the procedure of thought is not purely formal." "Logic is a clarified and systematized formulation of the procedures of thinking as will enable the desired reconstruction to go more economically and efficiently. In language familiar to students, logic is both a science and an art; a science so far as it gives an organized and tested descriptive account of the way in which thought actually goes on; an art, so far as on the basis of this description it projects methods by which future thinking shall take advantage of the operations that lead to success and avoid those which result in failure."

The phrase "organized and tested descriptive account of the way in which thought actually goes on" sounds interesting. But when Professor Dewey comes to interpret his meaning, we are disappointed. "Out of this relationship of cause and effect as it is empirically ascertained grow the norms and regulations of an art of thinking." "The structure of alleged normative apriori mathematics is in truth the crowned result of ages of toilsome experience." "Logic is a matter of profound human importance precisely because it is empirically founded and experimentally applied." "Men began with counting and measuring things just as they began with pounding and burning them."

It is not fair to take a few sentences from a lecture and judge the lecture by them. Yet I think the purpose of the lecture is to show that truth has its source in action. The ultimate is not truth, but action. If this dictum of Professor Dewey stands, his purpose to clear the field of logic of variety will fail. He adds to the menagerie. It is this dictum that I wish to consider. I admit at once that truth works. It is the only thing that does work satisfactorily. That is, the man who has a clear concept of an engine can build one. But I am unable to find a case of pure action. Galileo discovered a law mixed in the action of the rock that fell from the tower of Pisa. Heraclitus could not state his theory of universal motion without contradicting it with his doctrine of logos. Buddhism made an effort to state an ultimate condition of change and contradicted this statement in its doctrine of Karma. The doctrine of Professor Dewey is not new. Nor does he avoid the rock upon which his predecessors floundered. "Organized and tested" do not suggest ultimate action or change. Any change would be fatal to a "Test." The process of measuring cloth can not serve as a test of the yardstick. Perhaps an illustration will clear the matter. A man wishes to grow corn. He proceeds to indulge in the process of growing corn. He plows and harrows, harrows and plows, and in due time a grain of corn is produced. My contention is that the grain of corn is apriori to the process of growing corn. The grain must preceed, not follow the process of growing corn. The cultivation will affect the quantity of corn, but does not generate the corn. The sphere of pragmatism is the sphere of quantity. Action as a simple, ultimate concept is a contradiction.

With an inadequate view of sensation and a contradictory view of action, it is to be expected that the account of the beginning of thinking and the range of thinking will be unsatisfactory. Indeed, to one who loves the process of thinking and marvels at its range and power and richness, this part of the discussion is especially disappointing.

"Thinking," says Professor Dewey begins in trouble. "Men do not in their natural estate, think when they have no trouble to cope with, no difficulties to overcome." "Beings who think are beings whose life is so hemmed in and restricted that they cannot directly carry through a course of action to victorious consummation." Later in this paragraph Professor Dewey makes this admission, "Difficulties occasion thinking only when thinking is the imperative or urgent way out." That is, in an ideal condition of life there would be no thinking. It follows that the best thinking takes place in hell. Under these conditions what is an unfortunate philosopher to do? But the case is worse still. Only some difficulties are to be relieved by thinking. There is competition. "Dreams, reveries, emotional idealizations are roads which are taken to escape the strain of perplexity and doubt." To this sad estate has our American philosopher reduced thinking. It is in business with dreams, reveries, and emotional idealizations. And we are to expect this view of thinking to reconstruct logic and lead us out into the open.

I have wondered if Professor Dewey has not confused *Verstand* and *Vernunft*? To handle a difficulty is first a matter of analysis. What is it? What is its cause? What will be the effect? These are questions of analysis and classification and involve the process of *Verstand.* The *Vernunft* is not directly involved in these. The sphere of thinking is not difficulties, but truth. Thinking has its source in the passion for truth. Difficulty is a hindrance, a limitation; thinking is a transcendence. Animals have their share of difficulties; but they do not think.

The thinker has his problems; but they are not defects of memory, or illusions of the senses, or the difficulties of faulty analysis and judgment. They are problems of thinking. That is, they arise in the development of thought. They spring out of growth, development, rather than out of misfortunes. They are solved by thinking only; never by any rhapsodical treatment. An example of what I mean is found in mathematics. When the student begins Algebra he comes upon the process of multiplying signs. Plus by plus gives plus. Minus by minus ought to give minus, but it does not. It gives plus. How? If the student will understand this, he must get busy. Where does the plus come in when you are dealing with two minus quantities? Only the one who thinks can answer this question. This is a genuine problem arising logically in the development of mathematics. If you study, these problems will arise. If you absorb them, you must think. The only way to escape the problems of intelligence, is not to be intelligent. If a student passes out of the static philosophy into the dynamic philosophy he will face the problem of the miracle. There is no escape. The problem lies in the journey. Only the intelligence that avoids all prodigal journeys escapes the problems of travel.

Then why does one think? Not to avoid a difficulty, but to express life. Thinking is positive, constructive, the full expression of life. Thinking is not the product of troubles; it is free and logical. That is, it unfolds from within. Nothing but the truth controls the thinker. No error has been able to live in the light of truth. As a boy I made an effort to see seven times eight as fifty five. When I saw it as fifty six, it was impossible to consider fifty five. The mind would not take hold. Thinking is not accident, nor the product of custom, nor the outcome of trouble, nor the "easiest way to do a thing." The apple tree true to itself bears apples; a thinker true to thinking is logical. And so I am sure Professor Dewey is in error when he says, "To perceive this fact is to abolish rigid dogma from the world." We may abolish the wrong use of dogma. This is being done. We may abolish the process of substituting pictures, names, hopes for dogmas. But a genuine dogma properly understood is as essential as civilization.

What then is thinking? To answer this question means a course of lectures running through a year. It is beyond the scope of a criticism of one lecture. But one may indicate the line of answer. To think is to explore variety in search of that unity we call truth. Most of our impulses are separating forces. The senses tear their facts from larger wholes. Geometry fixes these parts as final, unchanging units. A right angle triangle never changes into anything else. Grand divisions are thus introduced into life, a kind of philosophical aristocracy. Man finds himself in this disjointed, lonely world.

It is the thinker who meets and checks these disintegrating forces. The ancient Hindoo thinker saw reality as unity, one supreme unity, Brahma. He likened the process of thinking to the action of the drop of water, resting not until it is back into the bosom of the ocean. Because the drop is water it seeks its own, the ocean. So thinking, because reality is unity, seeks unity which is truth. The Upanishads give brilliant illustration of thinking. By thinking the Hindoo lifts himself out of the bonds of the physical and lives forever in the world of truth. Here we see clearly the constructive, expanding, ennobling work of thinking.

The positive, constructive work of thinking is seen perhaps more clearly in Plato and Aristotle. These added the ideal world to Greek life. It was through the work of Plato and Aristotle that the Athenean ceased to compete with Sparta and became the leader of European civilization. The marvelous careers of Alexander, Augustine, Innocent III, are possible because of Plato and Aristotle.

If you object to these illustrations as too theoretical, then reflect upon the thinking of Maxwell. This thinker considers the square root of minus one and uncovers the possibility of wireless telegraphy. Here is genuine service of most practical kind. Or take the work of Pupin studying fundamental functions and giving to the world long distance telephoning. These examples of thinking show something of the nature of thinking. It is constructive and expanding.

If you protest that these are supreme cases, I agree and reply that if you would know an apple, you would not limit your study to the bloom or the little green thing that gives boys colic. You would surely take the mature sample. If you would observe the land, ascend the highest mountain peak and feast your eyes, do not go into some hole in the valley and then say life is just bumping against environment.

The world to-day seems to be short of great leaders. I have wondered whether the philosophers were not to blame. They have been giving us such little, superficial views. There is no depth to life, no reach to vision, just environment. Let us have done with kindergarten views of the nobler qualities of man. Let us invoke the spirit of Spinoza and restate our doctrine of the Absolute One that Spinoza knew as Substance. Let us invoke the spirit of Kant and renew our faith in man, in his moral nature and obedience to the categorical imperative. And then we shall be prepared to invoke the spirit of the supreme philosopher and see reality as Spirit. Then we shall see in its fulness what it is to think.

H. H. Williams.
University of North Carolina.

ON CERTAIN SUPPOSED FALLACIES OF THE CLASSICAL LOGIC.

No experience is more familiar to the mathematician than the need of extending the primitive meaning of his concepts, so as to include cases not previously suspected. Such extensions of meaning of the mathematician's assumed indefinables or of his symbols of relationship are of the greatest importance. They are only possible to the trained imagination and represent always the most serious obstacles in the learner's progress toward his goal. The mind, which has been only partly trained to follow the paths of scientific rigor, tends to fall back upon its more familiar points of view. It struggles to grasp the new, without yielding up the old conception.

If the mathematician has kept his secrets, as did his early ancestor, the Pythagorean of old, it is chiefly because these secrets